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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,329	08/29/2000	Thomas G. Adams	19927-000710US	8649

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EXAMINER

NALEVANKO, CHRISTOPHER R

ART UNIT PAPER NUMBER

2611

DATE MAILED: 07/14/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/650,329

Applicant(s)

ADAMS ET AL.

Examiner

Christopher R Nalevanko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4,7-9,13 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4,7-9,13 and 16-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/27/2004 has been entered.

### ***Response to Arguments***

1. Applicant's arguments filed 04/27/04 have been fully considered but they are not persuasive. Applicant argues, "it is also readily apparent the bus 36 is not in the host computer 18, but is contained within the decoder unit 16. A argued in the reply to the first Office Action, Maturi is therefore directed to the internal synchronization in decoder 16 and does not anticipate or suggest synchronization of a receiver circuit and a decoder circuit that are segregated and couple only through separate nodes of a bus in the host computer" (page 7 lines 10-15). Maturi clearly shows coupling the decoder circuit (26) with the receiver circuit (22) through separate nodes of a bus (36) (fig. 3). Furthermore, although Maturi shows a separate microcontroller and decoder system, the entire system (10) can be viewed as a computer. The entire system is the host computer which receives a stream through the receiving circuit (22).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4, 7, 8, 13, 16, 17, 20, 21, 24, and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Maturi et al.

Regarding Claim 4, Maturi shows a method for synchronizing a digital video host system including a host computer and a receiver circuit and a decoder circuit comprising coupling the receiver circuit with the decoder circuit only through separate nodes of a bus in the host computer (fig. 3 items 22, 36, 26, and 28) receiving a first transport packet from a transmitter (col. 2 lines 55-67), capturing a first system time clock timestamp at the start of receiving the first packet (col. 3 lines 20-25, 30-46, col. 7 lines 22-45, 64-67, col. 8 lines 1-15), obtaining a program clock reference timestamp (col. 5 lines 50-56), comparing the first STC timestamp to the PCR timestamp to generate comparison results (coll. 7 lines 22-45, 65-67, col. 8 lines 1-30), and adjusting the STC frequency based on the comparison results in order to maintain synchronization (col. 8 lines 37-49). Maturi shows capturing a system timestamp with the decoder (col. 7 lines 22-36) and adjusting the system timestamp with a scaled offset based on a message delay time between the decoder and receiver to maintain synchronization (col. 7 lines 22-53, col. 8 lines 1-47). Also, Maturi shows that an application system would be coupled to the decoder circuit but not the receiver circuit (fig. 3 items 30 and 32). As seen in figure 3, the video and

audio decoder circuits output data to the video presentation devices (video and audio out), therefor they are coupled to the application system. The receiver circuit ("bit-stream in" and pre-parser 22) is coupled to the decoder circuits through a bus, and is not directly coupled to the application circuit.

Regarding Claim 7, Maturi shows receiving data from the decoder into a register in a bus interface (see fig. 3, col. 3 lines 10-42) in the host computer, latching a second timestamp of the STC into another register in the bus after receiving the data (col. 3 lines 30-45, col. 5 lines 50-55, col. 6 lines 10-18, col. 7 lines 20-50), and providing the second timestamp to the decoder by way of the register (col. 7 lines 28-36, col. 8 lines 1-48). Furthermore, it is clear that this decoder performs this operation a numerous amount of times, providing multiple timestamps, in order to process and synchronize the thousands of data packets required to play a stream of video.

Regarding Claim 8, Maturi shows that the decoder is part of an audio-visual interface and the application system is an audio-visual system (col. 4 lines 40-52).

Regarding Claim 13, the limitations of the system claim has been discussed with regards to the method claim of Claim 4.

Regarding Claim 16, the limitations of the system claim has been discussed with regards to the method claim of Claim 7.

Regarding Claim 17, Maturi shows that the decoder is part of an audio-visual interface and the application system is an audio-visual system (col. 4 lines 40-52).

Regarding Claim 20, Maturi shows a method for synchronizing a digital video host system including a host computer (fig. 3 item 10), a receiver circuit and a decoder

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circuit (fig. 3) comprising coupling the receiver circuit with the decoder circuit only through a bus in the host computer (fig. 3 items 22, 36, 26, and 28), receiving a first transport packet from a transmitter (col. 2 lines 55-67), capturing a first system time clock timestamp at the start of receiving the first packet (col. 3 lines 20-25, 30-46, col. 7 lines 22-45, 64-67, col. 8 lines 1-15), obtaining a program clock reference timestamp (col. 5 lines 50-56), comparing the first STC timestamp to the PCR timestamp to generate comparison results (col. 7 lines 22-45, 65-67, col. 8 lines 1-30), and adjusting the STC frequency based on the comparison results in order to maintain synchronization (col. 8 lines 37-49). Maturi shows capturing a system timestamp with the decoder (col. 7 lines 22-36) and adjusting the system timestamp with a scaled offset based on a message delay time between the decoder and receiver to maintain synchronization (col. 7 lines 22-53, col. 8 lines 1-47). Maturi shows receiving data from the decoder into a register in a bus interface comprised by the bus in the host computer (see fig. 3, col. 3 lines 10-42), latching a second timestamp of the STC into another register in the bus after receiving the data (col. 3 lines 30-45, col. 5 lines 50-55, col. 6 lines 10-18, col. 7 lines 20-50), and providing the second timestamp to the decoder by way of the register (col. 7 lines 28-36, col. 8 lines 1-48). Furthermore, it is clear that this decoder performs this operation a numerous amount of times, providing multiple timestamps, in order to process and synchronize the thousands of data packets required to play a stream of video.

Regarding Claim 21, Maturi shows that the decoder is part of an audio-visual interface (col. 4 lines 40-52).

Regarding Claim 24, the limitations of the claim have been discussed with regards to Claim 20.

Regarding Claim 25, Maturi shows that the decoder is part of an audio-visual interface (col. 4 lines 40-52).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9, 18, 22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maturi et al.

Regarding Claims 9 and 18, Maturi fails to show that the decoder is part of a computer network interface and the application system is a networked computer system. Official Notice is taken that it is well known and expected in the art for a decoder to be included in a computer network. This allows the network to send MPEG data in order to display video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the decoder in a computer network interface so that the computer network could decode and display MPEG data.

Regarding Claim 22, Maturi fails to show that the decoder is part of a computer network interface. Official Notice is taken that it is well known and expected in the art for a decoder to be included in a computer network. This allows the network to send

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MPEG data in order to display video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the decoder in a computer network interface so that the computer network could decode and display MPEG data.

Regarding Claim 26, Maturi fails to show that the decoder is part of a computer network interface. Official Notice is taken that it is well known and expected in the art for a decoder to be included in a computer network. This allows the network to send MPEG data in order to display video. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the decoder in a computer network interface so that the computer network could decode and display MPEG data.

4. Claims 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maturi et al in further view of Dokic (5,699,392).

Regarding Claim 19, Maturi shows that adjustments are made with an offset but fails to show that this offset is scaled by a non-unitary value. Dokic shows using a scale factor to change a correction factor (col. 9 lines 50-65). This scale factor can be a wide variety of values, depending on the situation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Maturi with the scaling ability of Dokic so that the system could handle a wide range of synchronization errors.



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Regarding Claim 23, the limitations of the claim have been discussed with regards to Claim 19.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Nalevanko whose telephone number is 703-305-8093. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Christopher Nalevanko  
AU 2611  
703-305-8093

cn  
June 24, 2004



**VIVEK SRIVASTAVA  
PRIMARY EXAMINER**